Linking Productivity to Trade in the Structural Estimation of Production within UK Manufacturing Industries

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Abstract

We explicitly consider company trade orientation and analyse productivity dynamics within 4-digit manufacturing industries, using FAME data on UK companies, over the 1994-2003 period. We extend the algorithm in Olley and Pakes (1996) to allow for a trade bias, driven by high productivity types selecting to exporting (Melitz, 2003) and are able to obtain consistent and unbiased estimates of the parameters of the production function and productivity, respectively. We demonstrate that the link between trade orientation and productivity within industries can only be established when one allows for trade orientation within the estimation procedure. We also show that over the period of analysis, aggregate productivity is driven by market share reallocations, away from inefficient and towards efficient companies, rather than from improvements in company level productivity.

KEYWORDS: Simultaneity, selection (exit and trade) biases, productivity dynamics, UK manufacturing companies, within 4-digit industries.

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